UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,907	11/21/2003	Jong Ho Kim	9988.080.00-US	7353

30827 7590 08/23/2006

MCKENNA LONG & ALDRIDGE LLP
1900 K STREET, NW
WASHINGTON, DC 20006

EXAMINER	
PATEL, RITA RAMESH	

ART UNIT	PAPER NUMBER
1746	

DATE MAILED: 08/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/717,907	KIM, JONG HO	
	Examiner	Art Unit	
	Rita R. Patel	1746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 November 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2 and 4-7* is/are rejected.

7)☒ Claim(s) *3* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 November 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *6/24/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Priority

Acknowledgement has been made of applicant's claim for priority under 35 U.S.C. 119. This application claims the benefit of Korean Application No. 10-2002-0073899 filed on November 26, 2002.

Drawings

The drawings received 11/21/03 are acceptable for examination purposes.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-2 and 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kenjo et al. herein referred to as "Kenjo" and further in view of Kwon (Pub. No. US 2001/0027579 A1).

Kenjo teaches a washing machine with a rotatable water-tub basket therein. Kenjo discloses the washing machine includes a water tub; a washing basket; a pulsator disposed rotatably on a bottom face of said washing basket; a driving

mechanism for driving said washing basket and pulsator; and a control device for controlling said driving machine, wherein the control device performs the following three steps: (f-1) spinning said washing basket and carrying centrifugal force working on cleansing water in said basket for cleansing articles to be cleansed; (f-2) spinning said washing basket, and spraying cleansing water from between said water guard and said basket into said basket for cleansing articles to be cleansed, and (f-3) spinning said pulsator for cleansing articles to be cleansed. Said control device is so structured to perform one of selecting one of said three steps and combining at least two steps out of said three steps for cleansing articles to be cleansed (col. 10, lines 27-52). Thus, Kenjo's invention provides a motivation for operating the pulsator in combination with the washing basket to achieve desired cleaning, by selection of the appropriate cleaning combination. Kenjo however, fails to teach specific operating speeds for said pulsator within the washing machine.

Kwon teaches a method of rinsing laundries in a washing machine wherein a predetermined amount of water is primarily fed to the washing tub 20 while constantly rotating the inner tub 23 at an initial speed S1 of no higher than a predetermined rpm, with the amount of water being predetermined. Then a circulation-rinsing step is performed a desired number of times, whereby the inner tub is rotated at a second speed, with the water repeatedly circulated from the washing tub to a nozzle provided at the upper portion of the washing tub through a water circulation hose, and sprayed under pressure from the nozzle into the washing tub. After the circulation-rinsing step S2, the water is drained from the washing tub to the outside of the cabinet through a

drain hose prior to rotating the inner tub at a third speed S3 of no lower than the second speed so as to dewater the rinse laundries (Abstract).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize Kwon's teaching of variable washing speeds, in combination with Kenjo's teaching of using a pulsator in combination with other washing functions of a washing machine, to achieve desired washing. When washing articles in a washing machine, the selection of the washing, spinning, and pulsating functions may be optimized in order to best cleanse the specific type of laundry being washed therein. Specifically, rotation speeds of the pulsator and washing tub are significant in washing articles therein, so that the articles are not washed with too little or too much agitation; too little agitation may result in insufficient cleaning, whereas too much agitation may tear fabrics therein or cause the apparatus to wastefully use energy for operation and/or tear articles therein being washed. Both washing tubs and pulsators are located within a washing apparatus and are known in the art to directly effect washing functions that occur within the washing apparatus, and optimizing the speeds of both such components is known in the art for achieving similar washing functions.

Thus, Kenjo's teaching of a pulsator operation further in view of Kwon's teaching of an initial speed S1 reads on applicant's claim for a first speed for the pulsator; Kenjo further in view of Kwon's teaching of a repeatable circulation-rinsing step S2 reads on applicant's claim for a second and third speed for the pulsator; and Kenjo further in view of Kwon's teaching of a third dewatering speed S3 reads on applicant's claim for a fourth speed of the pulsator.

Step S1 rotates at a speed of no higher than 50 rpm, step S2 rotates at a speed of 50-300 rpm, and step S3 rotates at a speed of no lower than 400 rpm (Paragraph [0036]). This reads on applicant's claim wherein the third predetermined speed is greater than the first. One of ordinary skill in the art at the time of the invention may at once envisage during the circulation-rinsing step S2 and the dewatering step S3 of Kwon, the articles being washed therein are rotated at a speed sufficient to push the water against the inner perforated walls of the tub and similarly push the laundry against the inner tub walls; rinsing steps and dewatering steps require removal of water from the articles within such a washing apparatus and are commonly performed in the art in this manner.

Allowable Subject Matter

Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Claim 3 incorporates the feature of a second speed of rotation within a washing machine that is operated at a lower speed than the first speed of rotation. Kwon does not disclose motivation to perform this feature, as Kwon teaches an initial speed of rotation occurring at no higher than 50 rpm and a second speed of 50-300 rpm.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ruhl et al. (Pub. No. US 2003/0056300 A1) teaches a pumping cycling control system for a washing machine, wherein a water sensor 185 and speed sensor 187 are couple to a CPU for controlling drive cycles and rotation speeds within the washing apparatus.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rita R. Patel whose telephone number is (571) 272-8701. The examiner can normally be reached on M-F: 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571) 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RRP

MICHAEL BARR
SUPERVISORY PATENT EXAMINER